

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method, comprising:
storing one or more of a plurality of color components of an image in a planar format; ~~and~~
storing two or more of the plurality of color components of the image in a packed format,
such that the plurality of color components are stored in a mixed format of planar format and
packed format ~~during memory management of the image; and~~
processing the color components of the image in the mixed format of planar format and
packed format
2. (Original) The method of claim 1,
wherein the storing the one or more of the plurality of color components of the image in the
in the planar format further comprises:
storing luminance components (Y) of the image in a planar array, and
wherein the storing the two or more of the plurality of color components of the image in the
packed format further comprises:
storing chrominance components (UV) of the image in a packed array.
3. (Currently Amended) The method of claim 1, wherein ~~the plurality processing of~~
color components ~~are presented in a color space as one of a YUV color space, a YCrCb color space,~~
~~a YIQ color space, and an RGB color space. comprises:~~
motion compensating the plurality of color components in the mixed format of planar
format and packed format.
4. (Original) The method of claim 1, wherein at least one of the plurality of color
components of the image are sub-sampled in a dimension of another color component of the image
as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space.
5. (Currently Amended) A method, comprising:
receiving an image consisting of a plurality of color components, wherein the plurality of
color components are received in a format as one of planar format and packed format; ~~and~~
converting the plurality of color components into a mixed format of planar format and
packed format, such that one or more of the plurality of color components are stored in a planar
format and two or more of the plurality of color components are stored in a packed format; ~~and~~
processing the color components of the image in the mixed format of planar format and
packed format.

6. (Currently Amended) The method of claim 5, wherein converting the plurality of color components ~~are presented in a color space as one of a YUV color space, a YCrCb color space, a YIQ color space, and an RGB color space~~ comprises:

storing luminance components (Y) of the image in a planar array, and
storing chrominance components (UV) of the image in a packed array.

7. (Currently Amended) The method of claim 5, wherein ~~at least one of processing the plurality of color components of the image are sub-sampled in a dimension of another color component of the image as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space~~ comprises:

motion compensating the plurality of color components in the mixed format of planar format and packed format.

8-13 (Cancelled)

14. (Currently Amended) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving an image consisting of a plurality of color components, wherein the plurality of color components are received in a format as one of planar format and packed format; ~~and~~

converting the plurality of color components into a mixed format of planar format and packed format, such that one or more of the plurality of color components are stored in a planar format and two or more of the plurality of color components are stored in a packed format; ~~and~~

processing the color components of the image in the mixed format of planar format and packed format.

15. (Currently Amended) The computer-readable medium of claim 14, wherein converting the plurality of color components ~~are presented in a color space as one of a YUV color space, a YCrCb color space, a YIQ color space, and an RGB color space~~ comprises:

storing luminance components (Y) of the image in a planar array, and
storing chrominance components (UV) of the image in a packed array.

16. (Currently Amended) The computer-readable medium of claim 14, wherein ~~at least one of processing the plurality of color components of the image are sub-sampled in a dimension of another color component of the image as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space~~ comprises:

motion compensating the plurality of color components in the mixed format of planar format and packed format.

17. (Currently Amended) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

~~converting the storing one or more of a plurality of color components of an image in the mixed format into a planar format; and~~

~~dispatching an image consisting of a storing two or more of the plurality of color components in a packed format such that the color components are stored in a mixed format of the planar format and the packed format; and~~

~~processing the color components of the image in the mixed format of planar format and packed format.~~

18. (Currently Amended) The computer-readable medium of claim 17, wherein ~~converting the plurality of color components in the mixed format into the planar format~~ comprises:

~~performing a memory copy of the luminance components (Y) within the planar area to a Y-plane of YUV planar arrays; and~~

~~performing alternate read/write out coping of the UV components into respective planes of the YUV planar arrays.~~

~~motion compensating the plurality of color components in the mixed format of planar format and packed format.~~

19. (Original) The computer-readable medium of claim 17, wherein at least one of the plurality of color components of the image are sub-sampled in a dimension of another color component of the image as one of a 4:2:0 space, a 4:2:2 space, and a 4:1:1 space.

20-22 (Cancelled)

23-28 (Withdrawn).

29. (Currently Amended) A method, comprising:
receiving a decoded block of color components of an image in a mixed format of a motion packed format and a planar format;

~~converting motion compensating the decoded block of color components in the mixed format into a format as one of the according to a motion vector and a reference frame stored in the mixed format of the packed format and the planar format;~~

~~repeating the receiving and the converting for a plurality of blocks of color components;~~

storing a reference frame from motion compensation of the decoded block ~~the plurality of blocks of color components in a~~ the mixed format as of the planar format and the packed format; and

repeating the receiving, the converting and the storing for each decoded block of color components of the image.

30. (Withdrawn).

31. (Currently Amended) The method of claim 29, further comprising:
~~wherein converting the block of color components is converted into the planar format, and,~~
~~wherein the plurality of blocks of color components are stored in the planar format.~~

32. (Currently Amended) The method of claim 29, further comprising:
~~wherein the block of color components is converted into the packed format, and~~
~~wherein the blocks of color component are stored in the packed format.~~
converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

33. (Currently Amended) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving a decoded block of a color components of an image in a mixed format of a packed format and a planar format;

~~converting motion compensating the~~ decoded block of color components in the mixed format ~~into a format as one of the~~ according to a motion vector and a reference frame stored in the mixed format of the packed format and the planar format;

~~repeating the receiving and the converting for a plurality of blocks of color components;~~

storing a reference frame from motion compensation of the decoded block ~~the plurality of blocks of color components in a~~ the mixed format as of the planar format and the packed format; and

repeating the receiving, the converting and the storing for each block of color components of the image.

34. (Withdrawn).

35. (Currently Amended) The computer-readable medium of claim 33, further comprising:

~~wherein converting the block of color components is converted into the planar format, and
wherein the plurality of blocks of color components are stored in the planar format.~~

36. (Currently Amended) The computer-readable medium of claim 33, further comprising:

~~wherein the block of color components is converted into the packed format, and
wherein the blocks of color component are stored in the packed format.~~

converting the motion compensated blocks of color components into a red, blue, green format to form a decoded image.

37. (Currently Amended) A method, comprising:

receiving a block of a color components of an image in a format as one of a packed format and a planar format;

decoding the received block to form a decoded block in the planar format;

converting the decoded block of color components into a mixed format of the packed format and the planar format;

motion compensating the decoded block of color components in the mixed format according to a vector and a reference frame stored in the mixed format of the packed format and the planar format; and

~~repeating the receiving and the converting for a plurality of blocks of color components;
storing the plurality of blocks of color components in the mixed format of the packed format and the planar format, such that one or more color components of the plurality of block are stored in a planar format and two or more of the color components of the plurality of block are stored in a packed format; and~~

repeating the receiving, the decoding, the converting and the ~~storing~~ motion compensating for each block of color components of the image.

38. (Withdrawn).

39. (Currently Amended) The method of claim 37, wherein motion compensating comprises:

~~wherein the block of color components is converted into the planar format, and~~

~~wherein the plurality of blocks of color components are stored in the planar format.~~

storing a reference frame from motion compensation of the decoded block in the mixed format of the planar format and packed format.

40. (Currently Amended) The method of claim 37, further comprising:
~~wherein the block of color components is converted into the packed format, and~~
~~wherein the blocks of color component are stored in the packed format.~~
converting the motion compensated blocks of color components into a red, blue, green
format to form a decoded image.

41. (Currently Amended) A computer-readable medium having stored thereon a set of instructions, the set of instruction, which when executed by a processor, cause the processor to perform a method comprising:

receiving a block of a color components of an image in a ~~format as one of a packed format~~
~~and a planar format;~~

converting the decoded block of color components into a mixed format of the packed format
and the planar format;

~~repeating the receiving and the converting color component for a plurality of blocks of color~~
~~components;~~

storing the plurality of blocks of color components in the mixed format of the packed
format and the planar format, such that one or more color components of the plurality of block are
stored in a packed format and two or more of the color components of the plurality of block are
stored in a planar format; and

motion compensating the decoded block of color components in the mixed format
according to a vector and a reference frame stored in the mixed format of the packed format and the
planar format; and

repeating the receiving, the decoding, the converting and the ~~storing~~ motion compensating
for each block of color components of the image.

42. (Withdrawn).

43. (Currently Amended) The computer-readable medium of claim 41, wherein motion
compensating comprises;

~~wherein the blocks of color components is converted into the planar format, and~~
~~wherein the plurality of blocks of color components are stored in the planar format.~~
storing a reference frame from motion compensation of the decoded block in the mixed
format of the planar format and packed format.

44. (Currently Amended) The computer-readable medium of claim 41, further comprising:

~~wherein the block of color components is converted into the packed format, and
wherein the blocks of color component are stored in the packed format.~~

converting the motion compensated blocks of color components into a red, blue, green
format to form a decoded image.